

## GIACOMO CORTI – CURRICULUM VITAE

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### Current position

- Director of Research, National Research Council of Italy (CNR)-Institute of Geosciences and Earth Resources (IGG)
- Head of the Florence research unit, CNR-IGG

### Other professional activity

- Member of the CNR commission for the International Union of Geological Sciences (IUGS)
- Member of the Earth Science PhD board of the University of Florence (2017-current)

### Education and past professional activity

- 2020-current: Director of Research CNR-IGG, Florence (Italy)
- 2013-2021: Contract Professor, University of Florence (Italy)
- 2010-2020: Senior Researcher CNR-IGG, Florence (Italy)
- Research Associate, National Institute of Geophysics and Volcanology, Pisa
- 2004-2009: Researcher CNR-IGG, Florence (Italy)
- 2003: PhD in Earth Sciences, University of Pisa (Italy)
- 1997: Laurea (MsC equivalent) in Geological Sciences, University of Florence (Italy)
- 1996: Erasmus School on Structural Geology and Tectonics, International Centre for Theoretical Physics, Trieste (Italy).
- 1993: Erasmus project, Rijksuniversiteit di Utrecht (The Netherlands).

### Main scientific activity

- Dynamics of continental rifting. Development and evolution of rift systems. Patterns of deformation in extensional areas in relations to varying boundary conditions (rheology, kinematics, strain rates, etc.).
- Analysis of the evolution of the East African Rift System with special emphasis on the Main Ethiopian Rift. Analysis carried out through integration of experimental modelling, field geological-structural studies and geophysical data.
- Analogue modeling of deformation processes at various scales, including continental collision, strike-slip deformation, multiphase deformation, magma emplacement, geomorphic processes.
- Active deformation of the Apennines.
- Active tectonics of Central America.
- Flow dynamics of the Antarctic ice sheet and meteorite accumulation.

### Publishing and scientific activity

- Author or co-author of 144 publications on high-rated international journals (*Nature geoscience*, *Nature communications*, *Earth and Planetary Science Letters*, *Geology*, *Earth-Science Reviews*, *Scientific Reports*, *Journal of Geophysical Research*, *Tectonics*, *Geophysical Research Letters*, *Terra Nova*, *Journal of Structural Geology*, *Tectonophysics*, etc.).
- H Index: 49 (Google Scholar), 47 (ResearchGate), 40 (Scopus), 38 (Isi Web of Knowledge).

- Reviewer for high-rated international journals (*Nature geoscience, Nature communications, Geology, Journal of Geophysical Research, Earth and Planetary Science Letters, Journal of the Geological Society, Tectonophysics, GCubed, Tectonics, Geological Society of London Special Publications, Gondwana Research, Journal of African Earth Sciences, Journal of Geodynamics, Journal of Structural Geology, Geodinamica Acta, Acta Vulcanologica*).
- Reviewer of international research projects [institutions: UNESCO; European Research Council; CNRS, France; NSF, USA; NSERC, Canada; NERC, UK; Helmholtz Association; Germany; American Chemical Society, USA, etc.].
- Main Organizer of GeoMod2008, Third International Geomodelling Conference (Florence, 21-26 Sept 2008) of the conference ‘Il terremoto del 29 Giugno 1919 e la sismicità in Mugello’.
- Member of the scientific committee of the international conference "GeoMod 2025" (Lisbon, 7-12 Sept 2025)
- Member of the organizing and logistic committee of the SIMP-AIV-SoGeI-SGI congress "Il Pianeta Dinamico: sviluppi e prospettive a 100 anni da Wegener" (Firenze 2-4 Settembre 2015)
- Co-organizer of the ‘Rift and Rifted Margins Webinar series’ (<https://www.gfz-potsdam.de/sektion/geodynamische-modellierung/projekte/rift-and-rifted-margins-online-seminar/>) from June 2020 to September 2021.
- Convener and chairman of several scientific sessions in international and national congresses, including: American Geophysical Union, San Francisco, USA (2015); European Geophysical Union, Vienna (2007, 2016, 2018-2026); GeoMod Montpellier (2016); International Symposium on Continental Rift Systems and Magmatic-Hydrothermal Activities, Wuhan, China (2023), Italian Geological Society (2014-2016, 2021), Geoitalia (2013).
- Invited speaker at several international and national congress (EGU General Assembly, Austria; RiftVolc meeting, UK; Analog modelling workshop, Austin, USA; Riftlink workshop, Germany; Italian Geological Society).
- Author of the divulgative book "Geologia e paesaggi della Rift Valley in Etiopia" (Geology and landscapes of the Ethiopian Rift Valley), edited by Pacini Editore/Edizioni CNR.
- Editor of the research topic “Extensional Tectonics and Relevance to a Green and Low-Carbon Future”, *Frontiers in Earth Science* (Feb 2026-current)
- Editor of research topic “From Earth to Lab Scale: Interpreting, Validating and Integrating Geological Data Through Analogue Modelling”, *Frontiers in Earth Science* (2021)
- Guest Editor of the special volume “Continental rifting and associated magmatism in space and time”, *Italian Journal of Geosciences*, Volume 141, Issue 3; Volume 142, Issues 1-2 (2020–2023)
- Guest Editor of the special volume “Quantitative modelling of geological processes”, *Tectonophysics*, Volume 484, Issues 1–4 (2008-2009)
- Guest Editor of the special volume “Analog modeling as an aid to structural interpretation”, *Interpretation*, Volume 5, Issue 1 (2015-2017)
- Guest Editor of the *Bollettino di Geofisica Teorica e Applicata* (extended abstracts of GeoMod2008) Volume 49, 2 supplement (2007-2008)
- Reviewer and committee member of PhD Thesis in national and international institutions (Università di RomaTre, Italy; Uppsala University, Sweden; Universidad Complutense de Madrid, Spain; Åbo Akademi University, Turku, Finland; Universidad Nacional Autónoma de México, Queretaro, Mexico; Utrecht University, The Netherlands)
- Reviewer for the Ministry of University and Research (Italy), VQR 2011-2014, Gruppo di Esperti della valutazione di Scienze della Terra, GEV 04.
- Lecturer at the International Course on Fluid Geochemistry – CIGEFLU 2019, Antofagasta-San Pedro de Atacama, Chile (Nov 2021)
- Lecturer at the China Geoscience University, Wuhan, China (Sept 2019)

- Lecturer at the International School of Geothermics, Bulgarian Academy of Sciences, Sofia, Bulgaria (Feb 2006)
- Lecturer at the Taller de Modelado Analogico de la Deformacion, University of Queretaro, Mexico (Aug 2005)
- Invited seminars at several International (Imperial College, London, UK; Southwestern Petroleum University, China; UNAM, Queretaro, Mexico; Bulgarian Academy of Sciences, Sofia, Bulgaria; Adama Science and Technology University, Adama, Ethiopia; Turku University, Finland etc.) and national (INGV; Univ Pisa; RomaTre Univ; Univ Sannio; etc.) institutions
- PhD Co-supervisor of students at the University of Florence and at China University of Geosciences, Wuhan (China)

### **Prizes and Awards**

- Included in World's Top 2% Scientists list compiled by Stanford University (2020-current)
- Editor's Citation for Excellence in Refereeing for Tectonics, 2018
- National Geographic Explorer since 2017
- Author of highly influential papers on continental rifting, including the top viewed article in Geophysical Research Letters (2025), the most downloaded paper in Tectonophysics (2012) and the second most downloaded paper in Earth Science Reviews (2009–2010)
- CNR achievement: point 4) of the Contratto Integrativo Nazionale titolato "Incentivazioni al personale anno 2005", 23.12.2005 (n. 0068163 del 01/10/2009).
- National Research outputs featured in the National Research Council Highlights (2008-2010), showcasing the most significant scientific contributions across the institution 2010

### **Main Projects**

**2024-current.** Associate partner in the research project "Talents - The doctoral rift science network for the energy transition", EU Horizon Europe Framework Programme (HORIZON) – call HORIZON-TMA-MSCA-DN..

**2024-2026.** Responsible of Research Unit 3 in the project "Beautiful, vital yet risky: (extinct) volcanic craters of South Ethiopia", European Space Agency.

**2023-2025.** Co-Principal Investigator of the project "Tectonics and magmatism during the initial opening of a continental rift: insights from south Ethiopia", finanziato dalla Royal Society (Regno Unito) nell'ambito dello schema di finanziamento "International Exchanges 2023 Cost Share (Italy)".

**2019-2022.** Responsible of Research Unit 3 in the project "Distribution of strain and magmatism during rifting" (PI: Derek Keir, Università degli Studi di Firenze – Prot. 2017P9AT72\_003), Ministero dell'Istruzione, dell'Università e della Ricerca - Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale (PRIN), Bando 2017.

**2017.** Principal Investigator, National Geographic Society Grant "Aborted propagation of the Ethiopian rift valley in the Turkana depression?" (n. 9976-16)

- 2016-2017.** Principal Investigator, Royal Society, International Exchanges Scheme - 2016/R2 - Standard Programme "Mechanics of ground deformation above magma reservoirs at active volcanoes"
- 2015.** Responsible of the project "The final stages of continental breakup: evidence from the Afar depression (Ethiopia) - Le fasi finali della rottura continentale: evidenze dalla Depressione dell'Afar (Etiopia)", Mobilità di Breve Durata - Short Term Mobility, C.N.R
- 2014.** Responsible of the project "Analisi della subsidenza indotta dalla intrusione di corpi magmatici durante le fasi di rottura continentale: modelli numerici e confronto con dati geologico-geofisici della rift valley in Etiopia", Mobilità di Breve Durata - Short Term Mobility, C.N.R
- 2013.** Responsible of Research Unit 5 in the project "Meteoriti antartiche" (PI: Luigi Folco, Università degli Studi di Pisa – PdR 2013/AZ2.04), Programma Nazionale di Ricerche in Antartide (PNRA Bando 2013).
- 2011-2013.** Responsible of the bilateral project "Analisi della dinamica di apertura del Golfo della California" (Ministero Affari Esteri-CONACyT, cooperation between Italy and Mexico).
- 2011.** Associate Partner European Project "Sculpting the Earth's landscape: insights from modelling deep-surface processes - TOPOMOD".
- 2010.** Responsible of Research Unit 2 in the project "Modellizzazione analogica del flusso glaciale: l'influenza delle variazioni climatiche sulla stabilità delle calotte glaciali" (responsabile: Rosaria Palmeri, MNA Siena – PdR 2010/A2.05) Programma Nazionale di Ricerche in Antartide (PNRA Bando 2009).
- 2008.** Participant to the project: EVOLUCIÓN DE LA MARGEN ORIENTAL DEL RIFT DEL GOLFO DE CALIFORNIA: UN ESTUDIO INTEGRADO DE LA DEFORMACIÓN Y EL MAGMATISMO DEL MIOCENO EN SINALOA, NAYARIT Y SU EXTENSIÓN OFF-SHORE, Consejo Nacional De Ciencia Y Tecnología (Conacyt) Messico (P.I.: Luca Ferrari, Queretaro, Mexico).
- 2007.** Responsible of the project "Integrazione di modelli analogici e numerici di rifts obliqui ed applicazioni al Rift Etiopico, Africa Orientale", Mobilità di Breve Durata - Short Term Mobility, C.N.R

## Peer Reviewed Scientific Publications (last 10 years)

Wan X., Maestrelli D., **Corti G.**, Sani F., Bonini M., Ge X., Lei Q., Zou Y., Chuanbo S. (2026). **Influence of pre-existing weak zones during continental compression: Insights from centrifuge models.** *Tectonics*, 45, e2025TC009257, <https://doi.org/10.1029/2025TC009257>

Chandresh R., Whittaker A.C., Bell R.E., **Corti G.**, Tortelli G., La Rosa A., Pagli C., Sani F., Keir D. (2026). **Spatial and temporal evolution of graben formation during rift linkage using quantitative geomorphology: Insights from Central Afar.** *Tectonics*, 45, e2025TC009276. <https://doi.org/10.1029/2025TC009276>

Rizzo R.E., Keir D., Muluneh A., Guðbrandsson S., Healy D., Sani F., **Corti G.**, Vannucchi P. (2026). **Fault Stability Assessment in Tectonically Active Geothermal Fields Through Integrated Stress Analysis.** *Geochemistry, Geophysics, Geosystems*, 27, e2025GC012719. <https://doi.org/10.1029/2025GC012719>

Zwaan F., Muluneh A.A., Liu J. Kosari E., Rosenau M., **Corti G.**, Sani F. (2025). **Local strain reorientation explains deformation of rift-oblique tectonic lineaments along the Main Ethiopian Rift.** *Тектоника*, 3(2), 40–57. <https://doi.org/10.55575/tektonika2025.3.2.86>.

**Corti G.**, Muluneh A., Stamps D.S., Keir D., Isola I., Mazzarini F., Brune S., Maestrelli D. (2025). **Control of gravitational potential energy on the distribution of off-rift volcanic activity in the Turkana Depression, East African Rift.** *Geophysical Research Letters*, 52, e2024GL114277. <https://doi.org/10.1029/2024GL114277>

Tortelli G., Gioncada A., Pagli C., Barfod D.N., **Corti G.**, Sani F., Mark D., Dymock R.C., Gebru E.F., Keir D. (2025). **Volcanism records plate thinning driven rift localization in Afar (Ethiopia) since 2-2.5 million years ago.** *Communications Earth and Environment*, 6, 395, <https://doi.org/10.1038/s43247-025-02356-04>

**Corti G.**, Maestrelli D., Bonini M., Sani F. (2025). **Off-rift volcanism during continental rifting: Observations and models with a focus on the Main Ethiopian Rift, East Africa,** *Journal of African Earth Sciences*, 226, 105590, <https://doi.org/10.1016/j.jafrearsci.2025.105590>.

Erbello A., Dupont-Nivet G., Kidane T., Nowaczyk N., Sudo M., Melnick D., Bookhagen B., Brune S., **Corti G.**, Gecho G., Strecker M.R. (2025). **Temporal variation in counterclockwise vertical-axis block rotations across a rift overlap zone, southwestern Ethiopia, East Africa.** *Tectonophysics*, 897, 230599, <https://doi.org/10.1016/j.tecto.2024.230599>

Sauvalle, R., Scaillet B., Prouteau G., Scaillet S. Cioni T. Franceschini Z., Frascerra D. Sani F., **Corti G.**, Melaku A., Andújar J. (2024). **Phase equilibrium constraints on the pre-eruptive conditions of alkaline basalts of the Main Ethiopian Rift and their bearing on the production of peralkaline rhyolites.** *Journal of Petrology*, 65, egael12, <https://doi.org/10.1093/petrology/egael12>

Franceschini Z., Cioni R., Scaillet S., Prouteau G., **Corti G.**, Sani F., Mondanaro A., Frascerra D., Melaku A.A., Scaillet B., Oppenheimer C., Duval F. (2024). **Pulsatory volcanism in the Main Ethiopian Rift and its environmental consequences.** *Communications Earth and Environment*, 5:568, <https://doi.org/10.1038/s43247-024-01703-1>

Muluneh A. Brune S., Pagli C., La Rosa A., Keir D., Neuharth D., **Corti G.** (2024). **To rotate or to link? The connection between the Red Sea and Gulf of Aden rifts in central Afar.** *Geophysical Research Letters*, 51, e2024GL108732. <https://doi.org/10.1029/2024GL108732>

Vendeville B.C., **Corti G.**, Boussarsar M., Ferrer O. (2024). **An alternative experimental configuration to generate wrench zone above a viscous layer.** *Journal of Structural Geology*, 184, 105166. <https://doi.org/10.1016/j.jsg.2024.105166>

- Maestrelli D., Sani F., Keir D., Pagli C., La Rosa A., Atnafu Muluneh A., Brune S., **Corti G.** (2024). **Reconciling plate motion and faulting at a Rift-Rift-Rift triple junction.** *Geology*, 52, 362–366, <https://doi.org/10.1130/G51909.1>
- Maestrelli D., **Corti G.**, Bonini M., Keir D., Facincani P., Vannucchi P., Del Ventisette C., Montanari D., Sani F. (2024). **Fault reactivation and growth at rift-related calderas.** *Earth and Planetary Science Letters*, 636, 118700, <https://doi.org/10.1016/j.epsl.2024.118700>
- Zou Y., Maestrelli D., **Corti G.**, Del Ventisette C., Wang L., Shen C. (2024). **Influence of inherited brittle fabrics on continental rifting: Insights from centrifuge experimental modeling and application to the East African Rift System.** *Tectonics*, 43, e2023TC007947. <https://doi.org/10.1029/2023TC007947>
- Nigussie W., Alemu A., Mickus K., Keir D., Demissie Z., Muhabaw Y., Muluneh A.A., **Corti G.**, Yehualaw E. (2023). **Subsurface structural control on geothermal resources in a magmatic rift: Gravity and magnetic study of the Tulu Moya Geothermal Prospect, Main Ethiopian Rift.** *Frontiers in Earth Sciences*, 11, <https://doi.org/10.3389/feart.2023.1181533>
- Bragagni A., Braschi E., Orlando A., Guarnieri L., **Corti G.**, Tommasini S. (2023). **Time-space variations in the East African Rift magmatism: the role of different mantle domains.** *Italian Journal of Geosciences*, 142, 83-101, <https://doi.org/10.3301/IJG.2023.08>.
- Benvenuti M., **Corti G.**, Keir D., Sani F. (2023). **Transverse tectonics control on the Late Quaternary development of the Central Main Ethiopian Rift.** *Italian Journal of Geosciences*, 142, 42-56, <https://doi.org/10.3301/IJG.2023.05>.
- Corti G.**, Pagli C., Sani F., Braschi E., Gioncada A., Keir D. (2023). Guest Editors of the volume “Continental rifting and associated magmatism in space and time”, *Italian Journal of Geosciences* (Volume 141, Issue 3; Volume 142, Issues 1-2).
- Maestrelli D., Brune S., **Corti G.**, Keir D., Sani F. (2022). **Analog and Numerical modeling of Rift-Rift-Rift Triple junctions.** *Tectonics*, 41, e2022TC007491. <https://doi.org/10.1029/2022TC007491>.
- Saccorotti G., Bruni R., Bonini M., **Corti G.**, Keir D., Sani F. (2022). **Recent seismic sequences and activation of normal fault systems in the Mugello Basin and surrounding areas (Northern Apennines, Italy).** *Frontiers in Earth Science*, 10:879160. doi: 10.3389/feart.2022.879160.
- Corti G.**, Maestrelli D., Sani F. (2022). **Large-to local-scale control of pre-existing structures on continental rifting: examples from the Main Ethiopian Rift, East Africa.** *Frontiers in Earth Science*, 10:808503, doi: 10.3389/feart.2022.808503.
- Sternai P., Muller V.A.P., Jolivet L., Garzanti E., **Corti G.**, Pasquero C., Sembroni A., Faccenna C. (2021). **Effects of asthenospheric flow and orographic precipitation on continental rifting.** *Tectonophysics*, 820, 229120, <https://doi.org/10.1016/j.tecto.2021.229120>
- Maestrelli D., **Corti G.**, Bonini M., Montanari D., Sani F. (2021). **Caldera collapse and tectonics along the Main Ethiopian rift: reviewing possible relationships.** *Comptes Rendus Geoscience*, 353, S2, 1-19. <https://doi.org/10.5802/crgeos.63>.
- Milazzo F., CavoZZi C., **Corti G.**, Maestrelli D., Storti F. (2021). **Centrifuge modeling of thrust systems in the brittle crust: Role of frictional décollement geometry.** *Journal of Structural Geology*, 153, 104450.

Luzzi E., Rossi A.P., Massironi M., Pozzobon R., **Corti G.**, Maestrelli D. (2021). **Caldera collapse as the trigger of Chaos and fractured craters on the Moon and Mars.** *Geophysical Research Letters*, 48, e2021GL092436. <https://doi.org/10.1029/2021GL092436>

Visini F., Pace B., Meletti C., Marzocchi W., Akinci A., Azzaro R., Barani S., Barberi G., Barreca G., Basili R., Bird P., Bonini M., Burrato P., Busetti M., Carafa M.M.C., Cocina O., Console R., **Corti G.**, D'Agostino N., D'Amico S., D'Amico V., Dal Cin M., Falcone G., Fracassi U., Gee R., Kastelic V., Lai C.G., Langer H., Maesano F.E., Marchesini A., Martelli L., Monaco C., 7, Murru M., Peruzza L., Poli M.E., Pondrelli S., Rebez A., Rotondi R., Rovida A., Sani F., Santulin M., Scafidi D., Selva J., Slejko D., Spallarossa D., Tamaro A., Tarabusi G., Taroni M., Tiberti M.M., Tusa G., Tuvè T., Valensise G., Vannoli P., Varini E., Zanferrari A., Zuccolo E. (2021). **Earthquake Rupture Forecasts for the MPS19 Seismic Hazard Model of Italy.** *Annals of Geophysics*, 64, 2, SE220, 2021; doi:10.4401/ag-8608

Meletti C., Marzocchi W., D'Amico V., Lanzano G., Luzi L., Martinelli F., Pace B., Rovida A., Taroni M., Visini F., Akinci A., Anzidei M., Avallone A., Azzaro R., Barani S., Barberi G., Barreca G., Basili R., Bird P., Bonini M., Burrato P., Busetti M., Camassi R., Carafa M.M.C., Cavaliere A., Cecere G., Cheloni D., Chioccarelli E., Console R., **Corti G.**, D'agostino N., Dal Cin M., D'ambrosio C., D'amico M., D'amico S., Devoti R., Esposito A., Faenza L., Falcone G., Felicetta C., Fracassi U., Franco L., Galvani A., Gasperini P., Gee R., Gómez Capera A.A., Iervolino I., Kastelic V., CG Lai, M Locati, B Lolli, FE Maesano, Marchesini A., Mariucci M.T., Martelli L., Massa M., Metois M., Monaco C., Montone P., Moschetti M., Murru M., Pacor F., Pagani M., Pasolini C., Peresan A., Peruzza L., Pietrantonio G., Poli M.E., Pondrelli S., Puglia R., Rebez A., Riguzzi F., Roselli P., Rotondi R., Russo E., Sani F., M Santulin, G Selvaggi, D Scafidi, J Selva, V Sepe, E Serpelloni, Slejko D., Spallarossa D., Stallone A., Tamaro A., Tarabusi G., Tiberti M.M., Tuvè T., Valensise G., Vallone R., Vannoli P., Vannucci G., Varini E., Zanferrari A., Zuccolo E. (2021). **The new Italian Seismic Hazard Model (MPS19)** *Annals of Geophysics*, 64, 1, SE112, 2021, doi:10.4401/ag-8579

La Rosa A., Pagli C., Wang H., Doubre C., Leroy S., Sani F., **Corti G.**, Ayele A., Keir D. (2021). **Plate-boundary kinematics of the Afra linkage zone (Afar) from InSAR and seismicity.** *Journal of Geophysical Research*, 126, e2020JB021387. <https://doi.org/10.1029/2020JB021387>

Wang L., Maestrelli D., **Corti G.**, Zou Y., Shen C. (2021). **Normal fault reactivation during multiphase extension: analogue models and application to the Turkana depression, East Africa.** *Tectonophysics*, 811, 228870, <https://doi.org/10.1016/j.tecto.2021.228870>

Muluneh A.A., Keir D., **Corti G.** (2021). **Thermo-rheological properties of the Ethiopian lithosphere and evidence for transient fluid induced lower crustal seismicity beneath the Ethiopian Rift.** *Frontiers in Earth Science*, 9:610165. doi: 10.3389/feart.2021.610165.

La Rosa A., Keir D., Doubre C., Sani F., **Corti G.**, Leroy S., Ayele A., Pagli C. (2019). **Lower crustal earthquakes in the March 2018 sequence along the Western Margin of Afar.** *Geochemistry, Geophysics, Geosystems*, 22, e2020GC009614. <https://doi.org/10.1029/2020GC009614>

Maestrelli D., Bonini M., **Corti G.**, Del Ventisette C., Moratti G., Montanari D. (2021). **Exploring fault propagation and the role of inherited structures during caldera collapse through laboratory experiments.** *Journal of Volcanology and Geothermal Research*, 414, 107232, <https://doi.org/10.1016/j.jvolgeores.2021.107232>

Bonini M., Maestrelli D., **Corti G.**, Del Ventisette C., Moratti G., Carrasco-Núñez G., Giordano G., Lucci F., Norini G., Piccardi L., Urbani S., Montanari D. (2021). **Modelling intra-caldera resurgence settings: Laboratory experiments with application to the Los Humeros Volcanic Complex (Mexico).** *Journal of Geophysical Research*, 126, e2020JB020438. <https://doi.org/10.1029/2020JB020438>

Maestrelli D., Bonini M., **Corti G.**, Del Ventisette C., Moratti G., Montanari D. (2021). **A database of laboratory analogue models of caldera collapse testing the role of inherited structures).** *Frontiers in Earth Science*, 9:618258. doi: 10.3389/feart.2021.618258

- Maestrelli D., Montanari D., **Corti G.**, Del Ventisette C., Moratti G., Bonini M. (2020). **Exploring the interactions between rift propagation and inherited crustal fabrics through experimental modelling.** *Tectonics*, 39, e2020TC006211. <https://doi.org/10.1029/2020TC006211>
- Zwaan F., **Corti G.**, Keir D., Sani F. (2020). **An analogue modeling study of marginal flexure in Afar, East Africa: implications for passive margin formation.** *Tectonophysics*, 796, 228595
- Franceschini Z., Cioni R., Scaillet S., **Corti G.**, Sani F., Isola I., Mazzarini F., Duval F., Erbello A., Muluneh A., Brune S. (2020). **Recent volcano-tectonic activity of the Ririba rift and the evolution of rifting in South Ethiopia.** *Journal of Volcanology and Geothermal Research*, 402, 106989
- Siegburg M. Bull J.M., Nixon C.W., Keir D., Gernon T.M., **Corti G.**, Bekele Abebe B., Sanderson D.J., Ayele A. (2020). **Quantitative constraints on faulting and fault slip-rates in the northern Main Ethiopian Rift.** *Tectonics*, 39, e2019TC006046. <https://doi.org/10.1029/2019TC006046>
- Corti G.**, Sani F., Florio A.A., Greenfield T., Keir D., Erbello A., Muluneh A.A., Ayele A. (2020). **Tectonics of the Asela-Langano margin, Main Ethiopian Rift (East Africa).** *Tectonics*, 39, e2020TC006075. <https://doi.org/10.1029/2020TC006075>
- Muluneh A.A., Brune S., Illsley-Kemp F., **Corti G.**, Keir D., Glerum A., Kidane T., Mori J. (2020). **Mechanism for deep crustal seismicity: Insight from modeling of deformation process at the Main Ethiopian Rift.** *Geochemistry, Geophysics, Geosystems*, 21, e2020GC008935. <https://doi.org/10.1029/2020GC008935>
- Farolfi G., Keir D., **Corti G.**, Casagli N. (2020). **Spatial forecasting of seismicity provided from Earth observation by space satellite technology.** *Scientific Reports*, 10:9696 | <https://doi.org/10.1038/s41598-020-66478-9>.
- Zwaan F., **Corti G.**, Sani F., Keir D., Muluneh A., Illsley-Kemp F. Papini M. (2020). **Structural analysis of the Western Afar Margin, East Africa: evidence for multiphase rotational rifting.** *Tectonics*, 39, e2019TC006043, <https://doi.org/10.1029/2019TC006043>.
- Collanega L., **Corti G.**, Breda A., Massironi M., Keir D. (2020). **3D extension at plate boundaries accommodated by interacting fault systems.** *Scientific Reports*, 10:8669 | <https://doi.org/10.1038/s41598-020-65599-5>
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